

Appln. No.: 10/550,727

Reply to Office action of December 28, 2006

REMARKS

Claims 10-12 were previously cancelled, claims 13 and 21 are cancelled in this response, and claims 1-9 and 14-20 remain in this application.

Applicants respectfully traverse the Examiner's rejection of claims 1-4, 8, 9, 13-16 and 19-21 as being unpatentable over O'Connor (US 4,737,598) in view of Smith (US 2,358,743). O'Connor nor Smith, whether considered separately or in combination with one another could teach, motivate or suggest to one of ordinary skill in the art Applicants' claimed structure, and thus, the rejection should be withdrawn.

In claim 1, Applicants recite a longitudinally split tubular electromagnetic shielding sleeve having a substrate and an electrically conductive material layer fixed to an inner face thereof. The conductive layer extends from a first longitudinal edge of the substrate to a second longitudinal edge thereof. The substrate and the conductive layer are separated in a split segment at the first longitudinal edge, and the substrate and the conductive layer at the second longitudinal edge are inside the split segment between the substrate and the layer at the first longitudinal edge.

In contrast, O'Connor discloses a shielding tape for wrapping electrical conductors, and not a longitudinally slit sleeve. Further, the tape is constructed as a laminate of a conducting foil layer and an insulating dielectric layer (see Summary at Col 2, line 11, and Detailed Description at Col. 3, line 31), preferably formed with an adhesive (Col. 2, lines 63-68). In all of the Figures 2-4, the two layers are shown bonded completely along their entire abutting surfaces, with no separations being present between the two layers. This is acknowledged by the Examiner, and thus, the Examiner looks to another reference (Smith) to incorporate the missing split segment between the layers into O'Connor. In addition, a great deal of the emphasis in O'Connor is spent discussing the formation of folded portions via forming rollers 14, 141 to provide rolled back longitudinal edges. The rolled back longitudinal edges provide the desired configuration of the shielding tape upon wrapping the tape about the electrical conductors, namely that the foil layer is able to be wrapped back onto itself and further secured via an adhesive to provide continuous continuity completely around the electrical conductors. At no time is there any teaching or suggestion as to how the teachings of O'Connor could be modified to arrive at Applicants' claimed longitudinally slit sleeve construction having a substrate

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and an electrically conductive layer with a split segment at one longitudinal edge arranged for receipt of an opposite longitudinal edge of the substrate and conductive layer.

Regardless, the Examiner looks to Smith to make a combination in an attempt to arrive at Applicants' claimed longitudinally slit sleeve construction, which Applicants believe falls well short of teaching, motivating or suggesting to one having ordinary skill in the art their claimed construction. The teaching of Smith provides a flexible hose having a press cured lapped joint, wherein the joint has no tendency to open or separate under high fluid pressure (Col. 1, lines 18-26). The seam is press cured and consolidated by pressure and heat (Col 2, lines 12-31). Accordingly, Applicants are left wondering how this combination leads to their claimed construction? How is it that the teaching of O'Connor, which specifically provides for folded portions along longitudinal edges of the shielding tape, can be modified by Smith, which provides a press cured seam consolidated by pressure and heat (not longitudinally slit), to arrive at Applicants claimed construction for a longitudinally slit tubular electromagnetic shielding sleeve, among other things, having a split segment along one of its longitudinal edges for receipt of an opposite longitudinal edge? Applicants respectfully contend that there is no suggestion or motivation within either reference to make such a combination, and state further that the combination, even if made, fails to have sufficiency to make Applicants' claimed longitudinally slit sleeve construction obvious to one of ordinary skill in the art, and thus, believe the Examiner has failed to establish a proper prima facie case of obviousness. As such, Applicants believe the Examiner needs to explain why the combination is proper, and further, how it would result in Applicants' claimed construction. Lastly, Applicants note the last sentence in the first paragraph on page 4 of the Examiner's Office Action, which appears to suggest a "tight seal" is established in Applicants' claimed construction, when no such limitation is claimed by Applicants? As discussed above, Applicants claim is for a longitudinally slit tubular sleeve, not one in which a tight seal is established, such as would be the case if the press cured lapped joint of Smith were incorporated into Applicants' claimed sleeve construction.

Accordingly, Applicants respectfully request the rejection of claim 1 be withdrawn, and the claim allowed, as it is believed to be in proper form for allowance. Such action is respectfully requested.

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Claim 2 is dependent upon claim 1, and further recites the electrically conductive material layer as being an interleaved copper wire structure.

As discussed above, O'Connor discloses a layer of foil as the conductive layer, and not an interleaved copper wire structure. Applicants contend that to modify O'Connor to incorporate a wire layer would destroy its teaching, which calls for fabricating the shielding tape therein from a supply roll 10 of a laminated web which is subsequently sliced at a slitting station 12 via a plurality of slitting knives, and then folded at folding shoes or forming rollers 14, 141 (Col. 3, lines 30-64). Applicants are of the belief that if O'Connor were modified in a way suggested by the Examiner, that it is not known how the wire structure would be sliced and further processed at the folding shoes 14, 141? The layer of foil, preferably aluminum foil, has a thickness of 0.00025 to 0.002 inches, and the dielectric layer of polyester film has a layer of 0.00025 to 0.002 inches (Col. 2, lines 57-68), thus, allowing the laminated layers to be sliced and folded. The modification suggested by the Examiner would destroy this teaching, and thus, the modification is believed to be improper. Accordingly, Applicants believe the Examiner has used improper personal knowledge to make this obviousness rejection, and thus, an affidavit from the Examiner is requested with regard to this modification made without showing a reference teaching or suggesting such a modification. Otherwise, the Examiner is asked to show a proper reference or proper combination that shows a teaching or suggestion which arrives at Applicants' claimed construction.

Claim 4 is dependent upon claim 1, and further recites the substrate as being a sheet thermoformed into a self-curling strip with an overlap.

The Examiner as rejected this as being obvious over O'Connor in view of Smith, and states that the modified sleeve of O'Connor discloses the substrate being a sheet thermoformed into a self-curling strip. Applicants do not see any such teaching, motivation or suggestion in O'Connor, and thus, request the Examiner to provide a reference showing such a teaching or suggestion. Without such teaching or suggestion being evident in the cited references, Applicants believe claim 4 to further recite patentable subject matter.

Accordingly, claim 4 is believed to define patentable subject matter and to be in proper form for allowance. Such action is respectfully requested.

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Claim 7 is dependent upon base claim 1, and further recites the electrically conductive material layer being fixed to the substrate by one or more rows of stitches extending along the longitudinal direction of the sleeve.

As noted above, O'Connor discloses a laminate of a foil layer and a dielectric layer, preferably with an adhesive (Col. 2, lines 57-68). The laminate is processed via a slitting station. Given this express teaching, the Applicants do not see how or why stitches would be in obvious modification to O'Connor. It is not enough that the Examiner has located a reference utilizing stitches (US 3,612,744) to couple layers of material to one another. Utilizing stitches in themselves to join materials together of course is not new, as sewing is an old art. This said, the Examiner must still show why it would be that the references would have been combined by one having ordinary skill in the art. As things stand, Applicants contend this is an improper combination, as it is not known how stitches would be, or if they could be incorporated into the teachings of O'Connor? And thus, Applicants respectfully contend that the Examiner has failed to establish a prima facie case of obviousness.

Accordingly, claim 4 is believed to define patentable subject matter and to be in proper form for allowance. Such action is respectfully requested.

Claims 3, 5, 6, 8 and 9 are ultimately dependent upon base claim 1, and thus, are believed to define patentable subject matter for at least the same reasons, and to be in proper condition for allowance. Such action is respectfully requested.

Claim 14 recites a longitudinally slit tubular electromagnetic shielding sleeve having a substrate and an electrically conductive material layer fixed to an internal face of the substrate. The electrically conductive material layer extends substantially from a first longitudinal edge of the substrate to a second longitudinal edge of the substrate. The substrate and the electrically conductive material layer are separated in a first split segment at the first edge and in a second split segment at the second edge. The substrate at the second edge is inside the first split segment between the substrate and the electrically conductive material layer at the first edge, and the electrically conductive material layer at the first edge is inside the second split segment between the substrate and the electrically conductive material layer at the second edge.

In contrast, as discussed above in support of claim 1, O'Connor teaches a shielding tape for wrapping electrical conductors that is constructed as a laminate of a conducting

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foil layer and an insulating dielectric layer, preferably formed with an adhesive (Col. 2, lines 63-68). In all of the Figures 2-4, the two layers are shown bonded completely along their entire abutting surfaces, with no separations being present between the two layers. To modify O'Connor in combination with Smith is not only believed to be improper, but it also fails to arrive at Applicants' claimed construction for at least the same reasons stated above in support of claim 1.

Accordingly, claim 14 is believed to define patentable subject matter and to be in proper form for allowance. Such action is respectfully requested.

Claim 15 is dependent upon claim 14, and is believed to further define patentable subject matter for at least the same reasons stated above in support of claim 2. Such action is respectfully requested.

Claim 16 is dependent upon claim 14, and is believed to further define patentable subject matter for at least the same reasons stated above in support of claim 4. Such action is respectfully requested.

Claim 18 is dependent upon claim 14, and is believed to further define patentable subject matter for at least the same reasons stated above in support of claim 7. Such action is respectfully requested.


Claims 17, 19 and 20 are dependent upon claim 14, and thus, are believed to define patentable subject matter for at least the same reasons. Such action is respectfully requested.

It is believed that this application now is in condition for allowance. Further and favorable action is requested.

The Patent Office is authorized to charge or refund any fee deficiency or excess to Deposit Account No. 04-1061.

Respectfully submitted,

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FEB. 2, 2007
Date

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CERTIFICATE OF MAILING

I hereby certify that this **After-Final Amendment** is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on February 6, 2007.

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